

SYSTEM AND METHOD FOR QUALITY OF SERVICE BASED SERVER CLUSTER
POWER MANAGEMENT

ABSTRACT OF THE DISCLOSURE

A system and method for Quality of Service (QoS) based server cluster power management is disclosed. The method of the present invention includes: grouping activities within a server cluster into predefined sets; assigning a priority level to each set; identifying a server hosting a set of lower-priority activities within the cluster; receiving a power interruption signal; and diverting power reserves of the server to another server in the cluster, in response to the power interruption signal. The system of the present invention includes: servers, hosting a plurality of activity sets each having an associated QoS level; power reserves coupled to the servers; a switch matrix coupled to direct the power reserves between the servers; and a power manager, coupled to the switch matrix, for commanding the switch matrix to divert power from servers hosting low QoS activity sets to servers hosting high-priority activity sets, in response to a power interruption.